

**BEST AVAILABLE COPY**IN THE CLAIMS

1. (currently amended) An electronic toothbrush comprising:  
a brush head portion having a bristle portion, to be inserted into an oral cavity for washing teeth; and  
a holder portion to be exposed outside the oral cavity;  
an n-type semiconductor which is formed of TiO<sub>2</sub> and to receive receives external light;  
and  
a solar battery electrically connected to said n-type semiconductor, said solar battery having an out put more than 0.5 and less than 3.0V and to superimpose superimposing an electrical potential on the n-type semiconductor in order to synergically enhance a photocatalytic effect of the n-type semiconductor semiconductor, being connected only to the n-type semiconductor.
2. (cancelled)
3. (cancelled)
4. (previously presented) The electronic toothbrush according to claim 2, wherein the TiO<sub>2</sub> is an anatase-type crystal.
5. (cancelled)

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6. (currently amended) An electronic brush comprising:  
a brush head portion having a bristle portion; wherein  
an n-type semiconductor which is formed of  $\text{TiO}_2$  and to receive receives external light;  
and

a solar battery having an out put more than 0.5 and less than 3.0V, connected only to the  
n-type semiconductor such that the n-type semiconductor is electrically connected to a negative  
pole of the solar battery, and to superimpose superimposes an electrical potential on the n-type  
semiconductor in order to synergically enhance a photocatalytic effect of the n-type  
semiconductor semiconductor, being connected only to the n-type semiconductor.

7. (cancelled)

8. (cancelled)

9. (cancelled)

10. (previously presented) The electronic brush according to claim 7, wherein the  
battery is embedded in a holder portion following the brush head portion, while the  $\text{TiO}_2$  is  
attached in the vicinity of the brush head protein, and these battery and the  $\text{TiO}_2$  are made  
conductive via a conductive line.